A RF DETECTOR ARRAY FOR MAGNETIC RESONANCE IMAGING

Abstract of Disclosure

A radio frequency (RF) detector array and a MRI system are provided. The detector array comprises a plurality of conductive array elements being substantially parallel to a conductive ground plane, a plurality of capacitors, wherein at least one capacitor is shunted from each array element to the ground plane to adjust a corresponding electrical length of each conductive array element, and, wherein a combination of each respective array element, at least one corresponding capacitor and the ground plane forms a resonator that resonates at a selected frequency. The detector array further a decoupling interface, and a plurality of matching boxes for matching each decoupled conductive strip to a selected impedance. A MRI system is provided including a detector array as described herein to produce MR images of the object to be imaged.

Figures